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A1

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(54) Title: METHOD FOR PRODUCTION OF NITRATE-CONTAINING PRODUCTS FROM UNDERCOOLING MELTS

(57) Abstract: The invention concerns a method for the production of nitrate containing products (fertilizers, technical products) from undercooling melts, wherein a XN - water solution is evaporated up to a content of 50-99.8 weight % XN, where X is one or more selected from Ca, Mg, NH<sub>4</sub>, Na and K, and N means nitrate. The preferred range of XN is 70-99.5 weight %. The melt is cooled down to and kept at a temperature at or below the crystallisation point and finely divided solid XN powder consisting of the equilibrium phases is added to the melt. Melt drops are then formed and allowed to cool and solidify during up to 70 seconds. It is preferred to use a cooling belt for solidification of the particles. The belt is cooled by air, water, oil or another medium.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/NO 02/00400

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7: C01B 21/48, C01F 11/44, C05C 5/04, C05C 5/00, C05C 1/00**  
 According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC7: C01B, C01F, C05C**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

**SE,DK,FI,NO classes as above**

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**EPO-INTERNAL, WPI DATA**

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4569677 A (CALIS, G.H.M. ET AL), 11 February 1986 (11.02.86)  --	1-11
A	GB 768040 A (NORSK HYDRO-ELEKTRISK KVÆLSTOFAKTIESELSKAB), 13 February 1957 (13.02.57)  --	1-11
A	GB 510053 A (AZOGENO SOCIETE ANONIMA), 26 July 1939 (26.07.39)  --	1-11
A	WO 0183374 A2 (OMNIA FERTILIZER LIMITED), 8 November 2001 (08.11.01)  --	1-11

 Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	WO 0002831 A1 (NORSK HYDRO ASA), 20 January 2000 (20.01.00) --	1-11
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